

We claim:-

1. Superabsorbent foam comprising superabsorbent synthetic fiber  
5 and/or natural fiber selected from the group consisting of apple fiber, orange fiber, tomato fiber, wheat fiber and/or oat fiber.
2. Superabsorbent foam as claimed in claim 1, obtainable by  
10 foaming a polymerizable aqueous mixture comprising at least 50 mol% neutralized acid-functional monoethylenically unsaturated monomer or at least one basic polymer, crosslinker, superabsorbent fiber and at least one surfactant and subsequently polymerizing and/or crosslinking the foamed  
15 mixture.
3. Superabsorbent foam as claimed in claim 1 or 2, wherefor the polymerizable aqueous mixture contains from 0.01 to 10% by weight of superabsorbent fiber, based on the monomer.  
20
4. Superabsorbent foam as claimed in any of claims 1 to 3, wherefor the polymerizable aqueous mixture contains from 0.1 to 5% by weight of superabsorbent fiber, based on the monomer.  
25
5. Superabsorbent foam as claimed in any of claims 1 to 4, having been surface postcrosslinked.
6. Superabsorbent foam as claimed in any of claims 1 to 5,  
30 wherefor the polymerizable aqueous mixture comprises at least 50% aqueous sodium or potassium hydroxide solution neutralized acrylic acid, a crosslinker containing at least two ethylenically unsaturated double bonds, a radical-forming initiator, superabsorbent fiber composed of hydrolyzed and  
35 subsequently crosslinked copolymer of isobutene and maleic anhydride, and at least one surfactant.
7. Superabsorbent foam as claimed in any of claims 1 to 5, wherefor the polymerizable aqueous mixture comprises at least  
40 one basic polymer selected from the group consisting of polymers containing vinylamine units, polymers containing vinylguanidine units, polymers containing dialkylaminoalkyl(meth)acrylamide units, polyethyleneimines, ethyleneimine-grafted polyamidoamines and  
45 polydiallyldimethylammonium chlorides.

8. A process for producing superabsorbent foam having improved wet strength, which comprises foaming a crosslinkable aqueous mixture comprising at least 50 mol% neutralized acid-functional monoethylenically unsaturated monomer or at least one basic polymer, crosslinker, superabsorbent synthetic fiber and/or natural fiber selected from the group consisting of apple fiber, orange fiber, tomato fiber, wheat fiber and/or oat fiber and at least one surfactant and subsequently polymerizing the monomer in the foamed mixture or crosslinking the basic polymer to form a hydrogel foam.
9. A process as claimed in claim 8, wherein the aqueous mixture comprises from 0.01 to 10% by weight and preferably from 0.1 to 5% by weight of superabsorbent fiber.
10. A process as claimed in claim 8 or 9, wherein the foaming of the aqueous polymerizable mixture is effected by dissolving a radical-inert gas at from 2 to 400 bar and subsequently decompressing the mixture to atmospheric.
11. The use of the superabsorbent foam of any of claims 1 to 7 in hygiene articles to absorb body fluids, in dressing material to cover wounds, as a sealing material, as a packaging material, as a soil improver, as a soil substitute, to dewater sludges, to thicken waterborne paints or coatings in the course of disposing of residual quantities thereof, to dewater water-containing oils or hydrocarbons or as a material for filters in ventilation systems.